IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant	:	Evan F. Weis, *et al.*	Examiner	:	Nguyen, Hai V.
Serial No.	:	10/092,158	Art Unit	:	2142
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For	:	DEFINING FORCE SENSATIONS ASSOCIATED WITH GRAPHICAL IMAGES			

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REPLY BRIEF

Sir:

  This Reply Brief is filed under 37 C.F.R. § 41.41 in connection with the final rejection of claims 79-105 in the *Final Office Action* mailed July 28, 2005 and is filed in response to the *Examiner's Answer* mailed August 9, 2007. Pursuant to M.P.E.P. § 1208, this Reply Brief includes (A) an identification page; (B) a status of claims page; (C) a grounds of rejection to be reviewed on appeal page; and (D) Argument page(s).

Status of Claims

  Claims 79-105 stand finally rejected and are the subject of this appeal. This appeal concerns a utility application filed on March 5, 2002. The Appellant canceled claims 1-78 during the prosecution of the patent application. The Appellant added claims 79-105 during the prosecution of the patent application. Claims 79-105 were finally rejected in an *Office Action* mailed July 28, 2005.

<u>Grounds of Rejection to be Reviewed on Appeal</u>

The grounds of rejection to be reviewed in this appeal are:

1. Rejection of claims 79-105 under 35 U.S.C. §112, first paragraph; and

2. Rejection of claims 79-105 under 35 U.S.C. §112, second paragraph.

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<u>**Arguments**</u>

<u>**Ground 1: Rejection of claims 79-105 under 35 U.S.C. §112, first paragraph.**</u>

 The Examiner erred in rejecting claims 79-105 under 35 U.S.C. §112, first paragraph. 35 U.S.C. §112, first paragraph states, "[t]he specification shall contain a written description...in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains...to make and use the same." The claimed invention must be enabled so that one skilled in the art can make and use the invention without undue experimentation. *In re Wands*, 858 F.2d 778, 785, 8 USPQ2d 1217, 1223 (Fed. Cir. 1988). But a patent application need not disclose what is well known in the art. *In re Buchner*, 929 F.2d 660, 661, 18 USPQ2d 1331, 1332 (Fed. Cir. 1991). Further, "[t]he written description requirement does not require the Appellant 'to describe exactly the subject matter claimed, [instead] the description must clearly allow persons of ordinary skill in the art to recognize that [he or she] invented what is claimed.'" *Union Oil Co. of Cal. v. Atl. Richfield Co.*, 208 F.3d 989,998 (Fed. Cir. 2000) (citations omitted).

Claims 79 and 95

 The Examiner rejected claims 79 and 95 "for reciting, 'receiving an input signal from a network, the input signal comprising an embedded force feedback command,' and that the specification includes no enabling support." *Office Action*, page 2. Respectfully, "receiving an input signal from a network, the input signal comprising an embedded force feedback command" is enabled in the application.

 The Examiner states in the *Examiner's Answer*, "[t]he 'input' signal as claimed in claims 79 and 95, means you input some signal to something else. In these claims there is nothing to input the input signal." *Examiner's Answer*, page 4. It is unclear to Appellant whether the Examiner is attempting to indicate a lack of enablement related to where the input signal originated or to where the input signal is destined.

 "[T]he person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the

context of the entire patent, including the specification." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005). It is clear from the claims, particularly in the context of the specification, that the origination and the destination of the input signal is a computer.

The specification states, for example, "[i]n one embodiment, instructions are provided in the received web page which define an authored force effect for the plug-in. It essentially embeds function calls which are handled by the web browser." *Specification*, ¶ [0156], lines 1-13. In such an embodiment, the web page is the input signal received by a client, and the force feedback command is embedded in the web page. In such an embodiment, the web page is provided by a web server (origination), and the web browser executes on a client (destination).

The Examiner provides another ground for finding an alleged lack of enablement - "[i]t is clear that 'a signal' is different from 'input signal comprising an embedded force feedback command.'" *Examiner's Answer*, page 4. It is not clear at all to Appellant how "input signal" would not be construed as "a signal." The "input signal" claimed in Appellant's claims is clearly "a signal."

Thus, "receiving an input signal from a network, the input signal comprising an embedded force feedback command" is enabled in the application. Appellant respectfully submits that the rejection of claims 79 and 95 is improper and should be reversed.

Claims 91 and 102

The *Office Action* states, "Examiner is unable to find enabling support for a receiving step of claims 91 and 102." *Office Action*, page 2. Claims 91 and 102 recite "receiving a force feedback command." Respectfully, the receiving step of claims 91 and 102 is supported by the specification.

In Appellant's *Appeal Brief*, Appellant noted that the specification includes over forty pages describing a force-enabled authoring tool. *See Appeal Brief*, page 8. Appellant argued that when the author or user specifies a force feedback command, the force feedback command is received by the force-enabled authoring tool and embedded in a web page. *Id.* Examiner responds that this is an assumption not shown in the specification. *Examiner's* Answer, page 4. However, the specification includes numerous examples of the embedding of force feedback signals in a web page. For example, in the paragraph immediately preceding the section cited by Appellant, the specification states:

> Force feedback commands and parameters can be provided in the instructions or files of these other protocols and languages and **received by a client computer system** in an equivalent manner to that described above so that force feedback can be experienced in simulated 3-D space. For example, **embedded force feedback routines** for authored force effects **can be included in the VRML data** for a virtual environment so that when the user moves into a virtual wall, an obstruction force is generated on the user-manipulatable object.

Specification, ¶ [0162]. Thus, "receiving a force feedback command" is enabled in the application. Appellant respectfully submits that the rejection of claims 91 and 102 is improper and should be reversed.

Claims 86 and 97

The *Office Action* states that the Examiner is unable to find support in the specification for "overriding the first force feedback command with a second force feedback command" as claimed in claims 86 and 97. *See Office Action,* page 3. Respectfully, "overriding the first force feedback command with a second force feedback command" is supported by the specification.

According to the specification, "a web page can include force feedback information for authored effects (described below), and generic effects can also be applied to web page objects not having any authored effects associated with them, or **to**

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override particular authored effects as desired by the user of the client." *Specification,* ¶ [0085], lines 15-20 (emphasis added). In such an embodiment, the output signal is based on the "authored effect," the effect that is embedded in the page, and the browser overrides the authored effect with a generic effect specified by the user. *See Specification,* ¶¶ [0085]-[0087].

In the *Examiner's Answer*, the Examiner states, "Appellant assumes that the elements of 'the authored force feedback effect comprises the first force feedback command; the generic effect command comprises the second force feedback command' which are not shown in the specification." *Examiner's Answer,* page 5. The Examiner continues, stating that while it appears that the force feedback command and effect are related, "the force feedback effect cannot cause the force feedback command." *Id.* This is true. For example, a client machine can receive the force feedback command, parse the force information from the command, and cause forces (i.e., a force effect) to be output on an interface device. *See, e.g., Specification,* ¶ [0052].

The Examine continues, "The meaning of 'command' is different from the meaning of 'effect.'" *Examiner's Answer,* page 5. This statement is also true. The Examiner then concludes, "[t]herefore, overriding 'the force feedback command' cannot ride over 'the force feedback effect.'" *Id.* This conclusion does not follow logically from the Examiner's reasoning.

The effect and the command are different. Information for outputting the effect is contained within the command. *See, e.g., Specification,* ¶ [0052]. The specification states, "a web page can include force feedback information for authored effects (described below), and generic effects can also be applied to web page objects not having any authored effects associated with them, or to override particular authored effects as desired by the user of the client." *Specification,* ¶ [0085], lines 15-20 (emphasis added). As is clear throughout the specification, the information for both the original effect and the overriding effect are contained in a force feedback command.

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Thus, "overriding the first force feedback command with a second force feedback command" is supported by the specification. Appellant respectfully submits that the rejection of claims 86 and 97 is improper and should be reversed.

Claims 89 and 100

The *Office Action* states that the Examiner is unable to find support in the specification for "second force feedback command" as claimed in claims 89 and 100. In claims 89 and 100, Appellant claims, "generating a force feedback effect associated with the second force feedback command." In the *Examiner's Answer*, the Examiner states "one can assume that the ordinary skill in the art to understand the use of the terms 'first' and 'second.'" *Examiner's Answer*, page 5. The Examiner continues, "Applicant has not shown any evidence of the 'second force feedback command' and the specification does not provide an adequate written description for the second force feedback command." *Id.*

However, in the specification, Appellant describes generating a force feedback effect on a manipulandum in response to receiving a force feedback command. For example:

> In addition, computer 48 and/or interface 100 provide force feedback signals to actuators coupled to interface 100, and the actuators generate forces on members of the mechanical portion of the interface 100 to provide forces on mouse 36 in provided or desired degrees of freedom.

Specification, ¶ [0058], lines 3-7. In the embodiment Appellant described above in relation to claims 86 and 97, the first and second force feedback commands comprise the commands associated with the authored force and the generic force, respectively. Each command is associated with a particular force feedback effect. An actuator is able to generate the effect in response to receiving a force feedback signal embedded in the command. As Examiner states, one of skill in the art would understand the use of the terms "first" and "second." Thus, since two effects are generated, each associated with a command, "generating a force feedback effect associated with the second force feedback

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command" is enabled. Appellant respectfully submits that the rejection of claims 89 and 100 is improper and should be reversed.

Dependent Claims

Dependent claims 80-85, 87, 88, 90, 92-94, 96, 98, 99, and 102-105 are not addressed specifically in the *Office Action*. However, each of these claims depends from one of the claims discussed above and is supported in the specification. Accordingly, Appellant respectfully requests that the rejection of these dependent claims is improper and should be reversed.

Ground 2: Rejection of claims 79-105 under 35 U.S.C. §112, second paragraph.

The Examiner erred in rejecting claims 79-105 under 35 U.S.C. §112, second paragraph, as being allegedly indefinite for failing to particularly point out and distinctly claim the subject matter which Appellant regards as the invention. "The test for definiteness under 35 U.S.C. 112, second paragraph, is whether 'those skilled in the art would understand what is claimed when the claim is read in light of the specification.'" MPEP § 2173.02, citing *Orthokinetics, Inc. v. Safety Travel Chairs, Inc.*, 806 F.2d 1565, 1576, 1 USPQ2d 1081, 1088 (Fed. Cir. 1986). Respectfully, one of skill in the art would understand what is claimed when the claims are read in light of the specification.

The prior non-final *Office Action* stated that claims 79, 80, 85, 89, 92, 95, and 103 are indefinite because they recite the phrase "associated with," the nature of which, according to the *Office Action*, cannot be ascertained clearly. *See Office Action mailed November 24, 2004*, pages 3-4. The *Examiner's Answer* repeats this rejection. *Examiner's Answer*, page 6. Respectfully, the use of the phrase "associated with" does not render claims 79-105 indefinite under 35 U.S.C. § 112, paragraph 2.

In claim 79, Appellant claims a method comprising "generating an output signal associated with the force feedback command." The output signal is related to the force feedback command. For example, the output signal may be "operable to cause a

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manipulandum to output a force" as claimed in claim 82 or to "cause a force to be output in a simulation device" as claimed in claim 83.

"[T]he person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005). The person of ordinary skill in the art would understand what is claimed when the phrase "associated with" is used in the claims when the claim is read in light of the specification. The term "associated with" is used throughout the specification. For example, in the Summary of the Invention, the specification states,

> In a different embodiment, generic force effects are
> implemented. The client determines which web page
> objects are **force web page objects to be associated with**
> **at least one generic force effect**, where the force web page
> objects are of a predefined type. A generic force effect is
> assigned to each type of web page object as defined by
> effect information derived from the client machine. Generic
> force effects are output when a user-controlled cursor
> interacts with a force web page object.

Specification, ¶ [0015], lines 1-14 (emphasis added). Further, "[w]hen the web page is received by the client computer, the force-enabling code implemented by the client associates the forces from the preferences file (or default forces) to each graphical object and outputs the forces as appropriate." *Specification,* ¶ [0015], lines 1-14. In other words, the output signal – the force or actuator signal – is associated with the force feedback command. In each instance in the claims, the phrase "associated with" denotes a relationship between two things, e.g., an object or command and a force effect.

Thus, claims 79-105 are not indefinite, and Appellant respectfully submits that the rejection of these claims under 35 U.S.C. § 112, second paragraph is improper and should not be maintained.
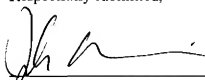
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Dependent Claims

Claims 81-84, 86-88, 90, 91, 93, 94, 96-102, 104, and 105 are not addressed specifically in the final *Office Action*. However, each of these claims is clearly supported in the specification. Accordingly, Appellant respectfully requests that the rejection of these claims is improper and should be reversed.

Conclusion

In view of the foregoing, it is submitted that the rejections of claims 79-105 is improper and should be reversed. Therefore, a reversal of the Final Rejection of the Examiner is respectfully requested.

Respectfully submitted,

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